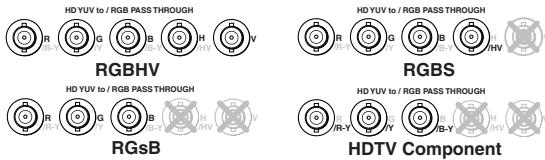
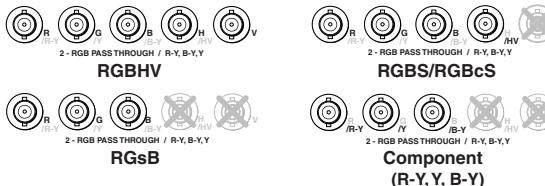


## Installation

1. Turn off power to the DVS 406 and all other devices that will be connected. See example application diagram below right.
2. If the scaler is to be rack or furniture mounted, position the brackets and insert the mounting screws. For rack mounting, be sure to remove the self-adhesive rubber feet if they have been attached. See the rack mounting diagram at right.
3. If using **Input 1**, attach an RGB or HD YUV pass-through signal. The HD YUV signal will be converted to RGB on the output.



If using **Input 2**, attach either an RGB pass-through, RGBcvS, YUVp, or YUVi signal.



If using **Inputs 3 to 5**, attach an S-video or composite video source.



If using **Input 6**, connect the SDI signal to the BNC.



4. Connect up to six balanced or unbalanced stereo audio input devices to the DVS 406. Each audio input has a 3.5 mm, 5-pole captive screw connector. The illustrations below indicate how to wire the connectors for the appropriate audio input type and impedance.



#### Unbalanced Input (high impedance)

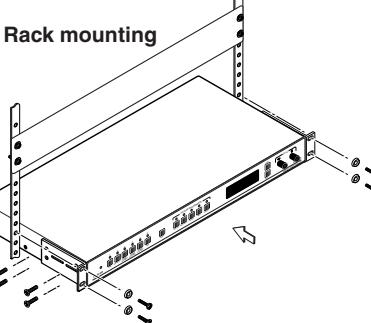
#### Balanced Input (high impedance)

#### Balanced Input (600 ohms)

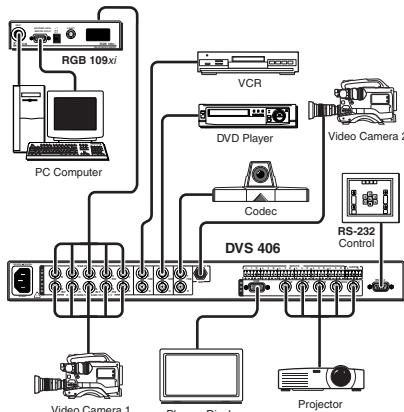
5. For display output, connect an output display device to the output BNC connectors.



6. Connect an RGB display device to the 15-pin HD output connector. Using this connector and the output BNCs will allow simultaneous output.

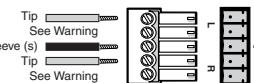


## Application Example

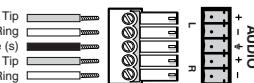


7. For unamplified audio output, connect an audio device to the 3.5 mm, 5-pole captive screw connector using the wiring diagram.

## Unbalanced Output



## Balanced Output

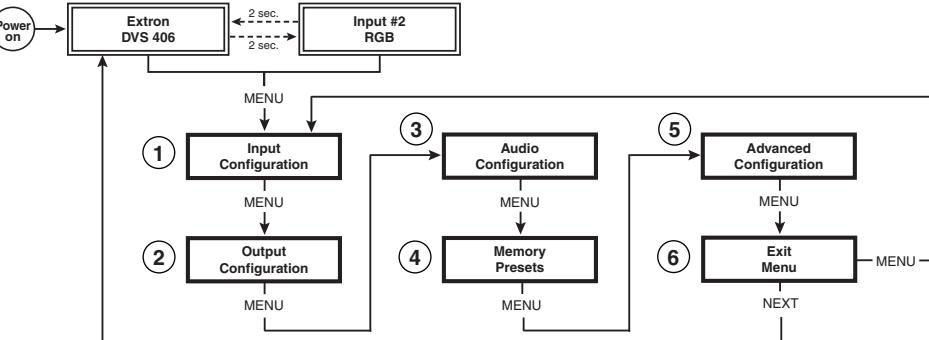


**NOTE** Connect the sleeve to ground. Connecting the sleeve to a negative (-) terminal will damage the audio output circuits.

8. Plug the DVS 406, and input and output devices into a grounded AC source, and turn on the input and output devices.
9. Use the LCD menu screens (see below) or RS-232 programming to configure the scaler.

## Main Menu System

Use the MENU and NEXT buttons to navigate through the menu system. Use the Adjust knobs to make configuration changes.



**1 Input configuration** – Select RGB or HD YUV pass-through for **Input 1**, RGB pass-through, RGBcvS, YUVp, or YUVi for **Input 2**, S-video or composite video for **Inputs 3 - 5**, or SDI (serial digital interface) for **Input 6**.

**2 Output configuration** – Select the required output resolution and refresh rate combination. Select the display's sync format: RGBHV, RGsB, or RGBS. Select positive or negative sync polarity for the horizontal and vertical sync.

**3 Audio configuration** – To create a smoother transition when switching from one audio input to another, the audio levels can be adjusted from -15dB to +9dB. Also, the timing for switching to a different audio input can be adjusted: **Start** (switches to the next audio at the beginning of the next video input), **Middle** (switches to the next audio halfway into the next video input), or **Fade** (gradually mutes the current audio halfway between the switch to the new video input; then gradually increases the next audio input from mute).

**4 Memory Presets** – The presets save **Sizing**, **Centering**, and **Blanking** information for each input (up to 3 presets per input) except for the pass-through inputs (**Input 1** and RGB on **Input 2**). Select a preset number in the Save submenu of the input, then press the NEXT button to save it, or delete a saved preset in the Clear submenu of the input by selecting it, then press the NEXT button to clear the preset.

To recall an input's saved preset, select the input and press the input button successive times to activate each saved preset for that input. Each recalled preset will display the message "Input #X Memory Y" where "X" refers to the input (2 to 6) and "Y" refers to the preset (1 to 3).

**5 Advanced Configuration** – When selecting the **Effect type** to transition from Input 1 and another input, a **cut** will cause an immediate switch, while a **dissolve** will cause a gradual fade out and fade in (.2 to 1.0 sec). The **Take** button initiates the switch. The **Edge smoothing** feature can be set On/Off. Edge smoothing softens the edges of a picture by minimizing pixel differences. The **Top and Bottom blanking** feature is used to remove noise and other undesired extraneous material, such as closed captioning, by removing scan lines from the top or bottom of the screen. Up to 127 lines can be removed.

**RGB delay** allows for glitchless switching between video inputs by switching to the new sync signal before switching to the new video signal. The video signal delay can be adjusted from 0 to 5 seconds in 0.5 second steps. The **Switch mode** feature enables input switching automatically (Auto) when a new input is selected, or only after the Take button is pressed (Take).

**Blue mode** can be set On/Off. Setting this mode On will pass only sync and blue signals to the display for setup purposes.

**Key mode** allows Input 1 and any other input to be displayed simultaneously, one over the other. Key mode must be set On and the other input must have its output resolution locked to Input 1. With the second input selected, press the Take button (Switch mode previously set to "Take"), then press Input 1 twice to initiate the Key mode effect. Press any input button to escape.

**Enhanced mode** can be set On/Off. Setting this mode On will activate signal gain for increased image sharpness.

**Reset** will reset the scaler to its factory default values. Press the Take button for about 2 seconds until the LCD confirm prompt message appears, then press the Take button again.

**6 Exit** – Return to the default menu cycle by pressing the NEXT button or return to the main menu system by pressing MENU.